REMARKS

Claims 1-38 were pending in the instant application when last examined and were rejected. Claims 1 - 6, 11 – 15, 20 – 22, 24, 29 – 31, 33 and 38 are being amended herein for greater clarity. Claims 7 - 10, 16 – 19, 25 - 28 and 34 – 37 are being cancelled without prejudice. New claims 39 - 42 are being added. No new matter is being added and claims 1 – 6, 11 – 15, 20 – 24, 29 – 33, and 38 – 42 are pending in the instant application. Reconsideration is respectfully requested.

Provisional rejection for nonstatutory double patenting

In items 2 – 3, Examiner rejected the claims under the judicially created doctrine of double patenting. Applicant includes herewith a terminal disclaimer in compliance with 37 CFR 1.321 (c) to overcome the rejection.

Objections to claims 4 and 14

In item 4, Examiner objected to claims 4 and 14 citing certain informalities. Applicant has amended these claims rendering the objections mute.

Rejection under 35 U.S.C. § 103(a) over Morgan i.v.o. Eder

In items 5 - 6, on pages 3 through 9 of the Office Action, the Examiner rejected claims 1-37 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,799,286 to Morgan et al. ("Morgan") in view of U.S. Patent No. 5,615,109 to Eder ("Eder"). Applicant respectfully traverses.

The Examiner asserts that Morgan teaches, a computer program product for creating a multi dimensional report from information in at least one database (col. 1, lines 50-56), including: code for receiving a definition of at least one customer profile of a plurality of customer profile groups (col. 1, lines 10-28) and code for receiving from a user input indicating a

report configuration selection (col. 2, lines 9-16). The Examiner admits that Morgan does not teach: code for creating at least one first dimension table based upon the report configuration selection and the information; code for creating at least one fact table based upon the report configuration selection and the information; and code for providing a report comprised of the at least one first dimension table and the at least one fact table.

The Examiner argues that Eder teaches: code for creating at least one first dimension table based upon the report configuration selection and the information (col. 1, lines 60-67 and col. 2, lines 1-22); code for creating at least one fact table based upon the report configuration selection and the information (col. 2, lines 24-43); and code for providing a report comprised of the at least one first dimension table and the at least one fact table (col. 12, lines 12-51). Examiner concludes that, "[i]t would have been obvious to one having ordinary skill in the art at the time the invention was made to create at least one first dimension table based upon said report configuration selection and said information; creat[e] at least one fact table based upon said report configuration selection and said information; and provid[e] a report comprised of said at least one first dimension table and said at least one fact table and to modify in Morgan."

Applicants disagree with the Examiner and traverse such rejection. Additionally, the Applicants respectfully request that the Examiner consider the grounds for withdrawal of the rejection provided herein, and agree to timely withdraw the rejection.

Specific embodiments of the invention satisfy the object of enabling a user to analyze information in a plurality of legacy databases in an easier, more accessible fashion. Claim 1 is representative, and as amended, recites:

1. A computer program product for analyzing information in at least one source database, said computer program product comprising:

code for receiving a definition of at least one of a plurality of customer profile groups;

code for receiving input indicating at least one quantity of interest in the information;

code for receiving a definition for a data model;

code for dynamically creating at least one generated database based upon the data model and configured to the quantity of interest, further comprising:

code for creating at least one first dimension table based upon the data schema and the quantity of interest; and

code for creating at least one fact table based upon the data schema and the quantity of interest and the information;

code for displaying at least a portion of the dynamically generated database; and

a computer readable storage medium for holding the codes.

Accordingly, independent claim 1 as amended distinguishes over the asserted combination of Morgan and Eder at least by reciting any one or more of, "*code for receiving input indicating at least one quantity of interest in the information*"; "*code for receiving a definition for a data model*"; "*code for dynamically creating at least one generated database based upon the data model and configured to the quantity of interest*" and "*code for displaying at least a portion of the dynamically generated database*". The embodiment of claim 1 includes model-driven dynamic generation of databases customized to the information needs of a user.

Support for these elements recited by claim 1 may be found in the Specification as filed, as follows, and no new matter has been added: "*code for receiving input indicating at least one quantity of interest in the information*" – Specification, page 7, lines 15 – 16 ("OLAP generated queries 4 can be generated by OLAP server 2 to retrieve a result set from database 6, for example."); "*code for receiving a definition for a data model*" – Specification, page 7, lines 25 - 26 ("Users can define a schema for database 6 from an administration console 20"); "*code for dynamically creating at least one generated database based upon the data model and configured to the quantity of interest*" – Specification, page 7, lines 25 – 26 and lines 29 – 30 ("After users define their models, the decision support manager 21 can automatically create databases, such as a database 6, according to the users' data model definitions."); and "*code for displaying at least a portion of the dynamically generated database*" – Specification, page 7, lines 4 – 6 ("The command inputs can be applied to database 6 in order to retrieve information that can be provided to the user for presentation on OLAP console 1 using a GUI or other presentation device.").

The examiner argues that Morgan teaches, a computer program product for creating a multi dimensional report from information in at least one database including code for receiving a customer profile and a report configuration.

Morgan, however, fails to teach, suggest or render obvious the embodiment recited by claim 1. Morgan illustrates a conventional activity management system that uses a conventional

relational database to manage costs associated with various activities input by the user into the system. (Morgan, Abstract). Morgan states that their work provides, "an automated activity-based management system (ABM) that provides continuous, dynamic, and real-time cost information and reports." (Morgan, col. 1, 59 – 61). Morgan uses a conventional approach of feeding general ledger accounting information and human resources information into a relational database and processing the information to provide reports. (Morgan, col. 2, lines 1 – 16). Morgan fails to teach, nor even suggest, generating a database based upon a user defined data model and configured to the quantity of interest, as recited in claim 1.

To the contrary, Morgan instead provides cost control methods using conventional database technology. For example, Morgan states that according to their approach:

> [t]he activity information and traditional accounting information are fed to a relational database. The information is processed and costs associated with the employee, facilities, equipment, and overhead components of activities are computed. User-definable ad-hoc reports as well as preformated reports for trending, forecasting, comparison, benchmarking, and budgeting purposes are available. (emphasis added.)

Morgan col. 2, lines 10 – 15.

Morgan's approach includes the entry of accounting information into a relational database, processing it, and providing reports to a user. This is quite conventional in approach. In fact Morgan actually appears to teach away because the accounting information must be entered ("fed") into the relational database. This approach is inconsistent with the data-model driven approach of claim 1. Further, rather than indicating a customer profile, the cited passage of Morgan, col. 1, lines 10 - 28 appear to indicate a statement of a problem to be solved:

> Conventional costing and management decision support systems use traditional profit and loss statements to analyze costs such as salaries, equipment, facilities, and administrative expenses. Based on these figures, business managers use direct material and labor consumption as the primary means of determining product costs and sale prices, and apportioning overhead costs. This method has been adequate when the overhead and administrative cost of activities not directly related to production was small compared with the direct material and labor required to manufacture the end product. However, in today's service businesses and manufacturing environments, automation has substantially reduced the amount of direct material and labor consumption, so that indirect activities have become a significant factor contributing to the cost of making the product. The result gives business managers a skewed view of how the business organization

> spends money, which may cause them to make pricing errors, mis-allocate resources, and make strategic mistakes.

Morgan, col. 1, lines 10 – 28. Accordingly, Morgan fails to make data-model driven analysis of information easily available to the user.

Morgan also fails to teach, suggest or otherwise render obvious and further teaches away from independent claim 11 as amended for substantially the same reasons as described with respect to claim 1.

Morgan further fails to teach, suggest or otherwise render obvious and further teaches away from independent claim 20 as amended. More specifically, Morgan provides a conventional data entry and report generation methodology in which the user enters the data into a relational database, processes it and views the result. (col. 2, lines 10 – 15) This directly conflicts with claim 20 at least with regard to "*code for receiving as input a third data model definition*"; "*code for creating a third database having a third data schema from the third data model*". Morgan's technique provides no model driven analysis of information. Further, in Morgan, there is no notion of multiple model analysis, as contemplated by "*defining a virtual data model*" and "*code for determining from the virtual data model a second data schema*" of claim 20 as amended.

Support for these elements recited by claim 20 may be found in the Specification as filed, as follows and no new matter has been added: "*code for receiving as input a third data model definition*" - Specification, page 7, lines 25 - 26 ("Users can define a schema for database 6 from an administration console 20"); "*code for creating a third database having a third data schema from the third data model*" - Specification, page 7, lines 25 – 26 and lines 29 – 32 ("After users define their models, the decision support manager 21 can automatically create databases, such as a database 6, according to the users' data model definitions."); "*code for creating a first mapping, that provides a translation for data from the first data schema to the second data schema*" – Specification, page 7, lines 32 – 33 ("Manager 21 can generate procedures and mapping rules to populate databases with data from the data warehouse 8"); "*code for creating a second mapping, that provides a translation for data from the second data schema to the third data schema*" – Specification, page 7, lines 11 – 12 ("OLAP meta data 3 can comprise a mapping from the user's multi-dimensional model 5 to a database model, such as database 6");

"*code for defining a virtual data model*" – Specification, page 10, lines 12 – 13 ("A meta model is an abstract data model that describes relationships between different entities or groups of entities in a data model"); "*code for determining from the virtual data model a second data schema*" – Specification, page 8, lines 16 – 20 ("data warehouse 8 can have an identity centric data organization with customer information comprising the center identity. This data organization is sometimes referred to as a "reverse star schema" data model. This data organization comprises a "back-end tier" of data warehouse 8, while the front end tier is based on a data model called a "star schema."); "*code for selectively migrating information from at least one of the first database to the second database according to the first mapping and the second database to the third database according to the second mapping*" - Specification, page 8, lines 24 – 26 ("The data can be transformed into a reverse star schema data model, for example, when it is stored into the data warehouse 8").

Morgan also fails to teach, suggest or otherwise render obvious and further teaches away from independent claim 30 as amended for substantially the same reasons as described with respect to claim 20.

Morgan also fails to teach, suggest or otherwise render obvious and further teaches away from independent claim 38 as amended for substantially the same reasons as described with respect to claims 1, 11 and 20.

Thus, Morgan cannot render the embodiments of claims 1, 11, 20, 30 and 38 obvious. Morgan further cannot be combined with any other references with regard to rendering the recited embodiments obvious, since to do so would be "undesirable" according to Morgan's teachings and would require a very substantial change to Morgan's principle of operation (see MPEP § 2143.01).

The remaining claims depend from claims 1, 11, 20, 30 and 38 and are patentable over Morgan for at least the same reasons that claims 1, 11, 20, 30 and 38 are patentable over Morgan, both alone and in combination with the other cited references.

It is therefore respectfully requested that Morgan be withdrawn from further consideration as a reference.

It is also requested that Eder should be withdrawn from further consideration as a reference. Eder first teaches a technique for inventory management and control (Eder, Abstract; col. 16, lines 16 - 23; col. 18, line 65 – col. 19, line 5) and not the data model driven creation of a generated database customized to user requirements in claim 1 as argued by the Examiner. Eder further fails to teach, suggest or otherwise render obvious claim1 with regard to the deficiencies of Morgan.

Rather, Eder teaches an inventory control method and system. (Eder, Abstract) Eder's system creates "detailed, multi-dimensional forecasts of sales and cash receipts" (Eder, Abstract, emphasis added). Eder's system includes application software that guides a user through the steps of updating forecast information in an application database:

> The application software of the system then checks to ensure that the required data dictionary and data source mapping tables for the user-specified data source have been completed and stored in the application database. If any required information isn't present in the application database, the user is prompted by the application software to provide the required information. After the required data dictionary and data mapping information are entered and stored in the application database, the application software establishes a connection with the specified data source utilizing user-input as required. The date of the transactions in the application database data tables are then compared with those in the specified data source by the application software of the present invention. The application software then creates a display showing the range of transaction dates that need to be added to each data table in the application database to bring the data up to date. The user is given the option of modifying or skipping the updates for specific tables before the application software copies the appropriate information from the specified data source to the tables in the application database of the present invention. The user is then prompted to provide input as required to complete the calculation of the various forecasts required for operation of the present invention. These forecasts are developed in a multi-step process that will be detailed below. (emphasis added.)

Eder, col. 21, line 58 – col. 22, line15.

Eder, however, does not teach the data-model driven approach of claim 1. In fact, Eder actually teaches away from the embodiment of claim 1, because Eder requires the use of data dictionaries and data mapping information to populate a database.

Eder also fails to teach, suggest or otherwise render obvious and further teaches away from independent claim 11 as amended for substantially the same reasons as described with respect to claim 1.

Eder further fails to teach, suggest or otherwise render obvious and further teaches away from independent claim 20 as amended. More specifically, Eder provides a conventional data entry and report generation methodology in which the user must use data dictionaries or data mappings to enter data into a relational database, processes it and views the result. This directly conflicts with claim 20 at least with regard to *"code for receiving as input a third data model definition"; "code for creating a third database having a third data schema from the third data model"*. Eder's method provides no model driven analysis of information. Further, in Eder, there is no notion of multiple model analysis, as contemplated by *"code for defining a virtual data model"* and *"code for determining from the virtual data model a second data schema"* of claim 20 as amended.

Eder also fails to teach, suggest or otherwise render obvious and further teaches away from independent claim 30 as amended for substantially the same reasons as described with respect to claim 20.

Eder also fails to teach, suggest or otherwise render obvious and further teaches away from independent claim 38 as amended for substantially the same reasons as described with respect to claims 1, 11 and 20.

Thus, Eder cannot render the embodiments of claims 1, 11, 20, 30 and 38 obvious. Eder further cannot be combined with any other references with regard to rendering the recited embodiments obvious, since to do so would be "undesirable" according to Eder's teachings and would require a very substantial change to Eder's principle of operation (see MPEP § 2143.01).

The remaining claims depend from claims 1, 11, 20, 30 and 38 and are patentable over Eder for at least the same reasons that claims 1, 11, 20, 30 and 38 are patentable over Eder, both alone and in combination with the other cited references.

It is therefore respectfully requested that Eder be withdrawn from further consideration as a reference.

Morgan describes techniques for controlling indirect costs of activities in a business. (Abstract). Eder describes a method for inventory management and control (Eder, Abstract; col. 16, lines 16 - 23; col. 18, line 65 – col. 19, line 5). There is no indication in any of Morgan and Eder to be combined with one another. Moreover, since indirect cost control and inventory management are different activities within a business, it appears that making such a combination would be difficult for one of ordinary skill in the art.

Morgan and Eder do not render the claimed embodiments of the present invention obvious for at least these reasons.

Accordingly, withdrawal of the rejections and early allowance of the rejected claims are respectfully solicited for at least the foregoing reasons.

If the Examiner has any questions or needs any additional information, the Examiner is invited to telephone the undersigned attorney at 011-813-5774-1807.

Respectfully submitted,

By _____
Paul A. Durdik
Attorney for Applicants
Reg. No. 37,819

Dated: June 12, 2003
Squire, Sanders & Dempsey L.L.P.
600 Hansen Way
Palo Alto, CA 94304-1043
Telephone (650) 856-6500
Facsimile (650) 856-3619